

**Notice of Allowability**

Application No.

10/062,546

Applicant(s)

BRYSELBOUT, FRANCIS

Examiner

Brian J. Sines

Art Unit

1743

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 9/14/2006.
2. ☒ The allowed claim(s) is/are 3-8, 10-14, 16-18, 20-24, 26-29 and 31.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, filed 9/14/2006, with respect to the rejection of the present claims under 35 U.S.C. 103(a) as being unpatentable over Honda in view of Saitoh and Collings have been fully considered and are persuasive. This rejection has been withdrawn.

### ***Allowable Subject Matter***

Claims 3 – 8, 10 – 14, 16 – 18, 20 – 24, 26 – 29 and 31 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 12, the cited prior art neither teach nor fairly suggest a process for the detection of hydrocarbons other than methane in a liquid oxygen bath of an evaporator of a unit for the production of gases from the air, the process comprising the steps of:

- (1) withdrawing a sample of liquid oxygen from the said bath,
- (2) evaporating said liquid oxygen, thereby producing an evaporated gas comprising at least 95% oxygen, and containing methane and said hydrocarbons other than methane, and
- (3) detecting the level of hydrocarbons other than methane in said evaporated gas, said detection comprising the following stages:
  - (a) adding hydrogen to said evaporated gas to provide a hydrogen/oxygen ratio between 10% and 40%,
  - (b) measuring the level of combined hydrocarbons in said gas, providing a first value for the combined hydrocarbons,
  - (c) incinerating the hydrocarbons other than methane in said gas

- (d) measuring the level of methane in said gas, providing a second value, and
- (e) calculating the amount of hydrocarbons other than methane by the difference between the first value and the second value.

Regarding claim 18, the cited prior art neither teach nor fairly suggest a device for the detection of hydrocarbons other than methane in a liquid oxygen bath of an evaporator of a unit for the manufacture of gases from air, the device comprising:

- means for the withdrawal of a sample of liquid oxygen from the said bath,
- means for the evaporation of said liquid oxygen, producing an evaporated gas,
- means for introducing hydrogen into said evaporated gas,
- means for the detection of combined hydrocarbons in said gas, providing a first value for combined hydrocarbons,
- means for combustion of hydrocarbons other than methane,
- means for the detection of methane, providing a second value,
- means for calculation of the amount of hydrocarbons other than methane by the difference between the first value and the second value, and
- means for triggering an alarm when the concentration or the level of hydrocarbons other than methane in said evaporated gas exceeds a certain limit value.

Regarding claim 31, the cited prior art neither teach nor fairly suggest a device for the detection of hydrocarbons other than methane in a liquid oxygen bath of an evaporator of a unit for the manufacture of gases from the air, the device comprising:

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means for the withdrawal of a sample of liquid oxygen from the bath,  
means for the evaporation of said liquid oxygen, producing an evaporated gas,  
means for introducing hydrogen into said evaporated gas,  
means for the detection of combined hydrocarbons in said gas, providing a first  
value for combined hydrocarbons,  
means for catalytic combustion of the hydrocarbons other than methane,  
means for the detection of methane, providing a second value,  
means for calculation of the amount of hydrocarbons other than methane by the  
difference between the first value and the second value,  
means for triggering an alarm when the concentration or the level of hydrocarbons  
other than methane in said evaporated gas exceeds a certain limit value,  
and  
wherein the means for the detection of the combined hydrocarbons and the  
means for the detection of methane comprises a flame ionization  
detector.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11 AM - 8 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Brian J. Sines". The signature is written in a cursive, flowing style with a large loop at the end.